

#### COMPTROLLER GENERAL OF THE UNITED STATES WASHINGTON D.C. 20548

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and of Congressional Relations

The Honorable James Florio Chairman, Subcommittee on Commerce. Transportation, and Tourism Committee on Energy and Commerce House of Representatives

RELEASED

Dear Mr. Chairman:

Subject: Assessment of the Department of Transportation's Systems Safety Plan (GAO/RCED-83-32)

On April 22, 1982, we testified before your subcommittee on our report "The Federal Approach to Rail Safety Inspection and Enforcement: Time for Change" (CED-82-51, Apr. 19, 1982) and on some limited work we had performed in assessing the Department of Transportation's (DOT's) Systems Safety Plan relating to DOT activities in carrying out rail safety laws. At that time you requested that we continue our review of the Plan and issue a separate report discussing our assessment of the Plan as a management document, the extent to which it is supported by studies or other documentation, and the legality of the enforcement philosophy discussed in the Plan.

We have reviewed the Plan and found that it describes goals for improved railroad safety and a general approach DOT's Federal Railroad Administration (FRA) has adopted to meet those goals. However, we found that:

- -- The Plan is a very general document that primarily is a statement of principles and does not propose what actions are to be taken, explain how safety objectives are to be carried out, or identify how progress toward achievement is to be evaluated.
- --There is little relationship between the Plan and the studies performed as part of the Plan's background and development.
- -- Since the Plan lacks specific enforcement standards, carrying it out could result in FRA not taking enforcement action in situations where it should.

#### OBJECTIVES, SCOPE, AND METHODOLOGY

Our objectives in this review were to determine (1) the value of the Systems Safety Plan as a management document, (2) if the Plan was supported by studies or other documentation, and (3) whether the enforcement philosophy discussed in the Plan was legally correct.

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To achieve these objectives, we:

- -- Reviewed the issued Systems Safety Plan and six earlier draft versions of it.
- -- Reviewed and analyzed 35 rail safety studies prepared in connection with the Plan for FRA by the Transportation Systems Center.
- --Assessed all written comments on the six draft versions of the Plan prepared by DOT and FRA officials. These included comments made by FRA Office of Safety and Office of Chief Counsel officials, including the Chief Counsel; and by officials within the Office of the Secretary of Transportation, including the General Counsel, the Assistant Secretary for Administration, the Assistant Secretary for Policy and International Affairs, and staff in the Office of the Assistant Secretary for Budget and Programs.
- --Examined and analyzed various safety statutes, legislative histories, and court cases.
- --Interviewed five FRA officials--the Associate Administrator for Safety; the Director, Office of Planning and Analysis, Office of Safety; and three officials within the Office of Chief Counsel, including the Chief Counsel.
- -- Interviewed two DOT officials from the Offices of the Assistant Secretary for Policy and International Affairs and the Assistant Secretary for Budget and Programs.
- --Interviewed officials from the National Transportation Safety Board, the Association of American Railroads, and the Railway Labor Executives Association.

We conducted our review from January through August 1982. It was performed in accordance with generally accepted government audit standards. The information was gathered at DOT and FRA headquarters in Washington, D.C.

#### THE SYSTEMS SAFETY PLAN

The Systems Safety Plan was originally requested by the Office of Management and Budget with funding provided in fiscal year 1978. Subsequently, section 16(c) of the Federal Railroad Safety Authorization Act of 1980 (Public Law 96-423) required that the Secretary of Transportation submit a Systems Safety Plan to the Congress no later than January 31, 1981. The Plan, which describes rail safety goals and a general approach to meet those goals, was submitted by the Secretary of Transportation to

the Congress in December 1981. The Plan was developed in three phases—study and analysis, report drafting, and report review and redrafting.

Primary responsibility for preparing the Plan was assigned to the Office of Planning and Analysis within FRA's Office of Safety. FRA entered into an agreement with DOT's Transportation Systems Center to make numerous rail safety studies to assist the Office of Safety in establishing program priorities and, according to FRA's Administrator, serve as the cornerstone for developing the Plan. Expenditures for the Center studies for fiscal years 1978 to 1981 were \$3,915,000. In addition to this cost, FRA officials estimated FRA used about 20 staff years to develop the Plan.

Six draft versions of the Plan were developed beginning in November 1980 until its issuance in December 1981. Outlines and drafts of the Plan were reviewed and commented on by many FRA officials during its preparation. Also, as part of the normal review process, drafts of the Plan were reviewed by key officials in the Office of the Secretary of Transportation.

# ASSESSMENT OF THE PLAN'S MAJOR OBJECTIVES

The Systems Safety Plan discussed programs and objectives in the areas of railroad safety goals, systems approach to rail safety and safety priorities, inspection, training, research and development, and regulation and enforcement. The more important objectives were in the areas of safety goals, systems approach and safety priorities, and regulation and enforcement. Our assessment of the Plan is that it is a very general document that primarily is a statement of principles and does not propose what actions are to be taken, explain how safety objectives are to be carried out, or identify how progress toward achievement is to be evaluated. Specifically, the Plan

- --establishes unsupported railroad safety goals;
- --identifies priorities for various accident types that are unsupported and does not specify a plan for acting on these priorities; and
- --discusses a new enforcement approach without explaining what specific actions are to take place or how progress in using this new approach is to be evaluated.

### Railroad safety goals

FRA established a 20-percent improvement as its goal for railroad safety over the 5-year period 1981 to 1985 when compared to the 5-year period 1976 to 1980. The 20-percent goal was applicable to each of the five priority elements of FRA's program,

that is, improving safety (1) in the transportation of hazardous materials, (2) in passenger train operations, (3) for railroad employees, (4) at rail-highway grade crossings, and (5) involving railroad trespasser fatalities. For example, the goal for improving safety in passenger train operations is to reduce the rate of passenger fatalities per billion passenger miles from 0.5 to 0.4.

The 20-percent improvement goal projected for each of the five safety elements differs with improvement goals, which varied by safety element, projected in prior drafts of the Plan. A cognizant FRA Office of Safety official could provide no documented rationale for the 20-percent improvement goals and told us that the goals were broad estimates. He stated that new approaches for cooperatively addressing railroad safety with railroad management and rail labor have been initiated and others are evolving. FRA presumably believes that these new approaches will enable it to achieve the improvement goals. The FRA Administrator, testifying before your subcommittee in April 1982, said that the 20-percent goal was totally arbitrary and that there was no basis for it. Further, the Plan does not discuss what specific actions are to be taken to achieve the goals or how progress toward their achievement is to be evaluated.

Three offices within the Office of the Secretary, in commenting on the final draft of the Plan, criticized or suggested changes to the Plan's goal section.

One office, in October 1981, wrote that it would be useful to reflect quantitative data used to arrive at and support the goal of 20-percent improvement in 5 years.

Another office questioned the selection of the five safety elements as well as the improvement goals and commented that, while the five priority elements had some intuitive logic, the Plan gave no indication that these five areas were selected by an analytical process as the most critical problems from a safety perspective as compared to a broader universe of such problems. Further, the use of a 20-percent improvement goal was similarly lacking in supporting logic or analysis. Also, several of the goals were timidly drawn, having already been met or exceeded in recent years.

Officials in a third office commented that it was unclear why FRA chose the goals given in the report for safety improvements, and added that the goal set for reducing railroad grade crossing accidents appears to have already been met.

These comments did not result in any changes being made to the Plan before it was issued. A memorandum from FRA's Administrator to the three offices on October 26, 1981, agreed that the offices criticisms were reasonable but suggested that the Plan be issued since it was long overdue in being submitted to the Congress. The Plan was issued shortly thereafter without further significant changes.

# The Plan's approach to rail safety and safety priorities

The Systems Safety Plan establishes a new priority order for concentrating rail safety efforts on those categories of rail accidents that pose the highest risk of fatalities, injuries, and property damage. The Plan identifies hazardous materials and passenger safety as the most important categories and which would receive first inspection priority. Other priorities are the employee safety, rail-highway crossings, and trespasser safety categories.

The section of the Plan discussing priorities is very general and is covered in basically one paragraph. The Plan does not provide support for the relative priorities accorded the various accident types. Further, our review of the records and studies prepared in connection with the Plan as well as our discussions with FRA officials did not provide any detailed support for the priorities. Moreover, neither the Plan nor any other FRA document specifies a plan for acting on these priorities.

The Director, Office of Planning and Analysis, Office of Safety, FRA, responded to our request for a rationale for the priorities given to the various accident types as follows:

"The accident types emphasized in FRA's Systems Safety Plan all involve significant actual or potential loss of human life. Highest priority was given to reducing the risk of a catastrophic hazardous material accident. The rationale for this is that such an accident could result in a large loss of human life; that it is an area of serious public concern; that the potential victims have not knowingly or willingly placed themselves at risk; and that the range of potential FRA actions would significantly affect accident risk.

"Employee fatalities receive higher priority than rail-highway crossing or trespasser fatalities primarily because the opportunity for a direct FRA impact is greater. Most rail-related fatalities occur at rail-highway crossings or are trespasser fatalities; however, the potential range for FRA action in these two areas is limited. The most significant reductions in rail-highway crossing accidents result from the elimination of grade crossings and the installation of warning devices and from public education efforts such as Operation Lifesaver. Effective strategies for reducing trespasser fatalities have not yet been demonstrated."

This statement, in our opinion, represents a very general response for a rationale for the priority accorded the various accident types discussed in the Plan. The generality of this section of the Plan and of this rationale leaves substantially unanswered how these priorities were arrived at, how they will be carried out, and how progress toward their achievement will be evaluated. For example, we would have expected the Plan to specify the correlation between past expenditures and inspector resource commitment and safety for the various accident types. Also, a discussion of the financial and staff year commitment for each of the five accident types over the next 5 years would have been beneficial and provided a basis for assessing results.

### Regulation and enforcement

The Systems Safety Plan states that until recently FRA's emphasis in railroad safety was to encourage safe operation through the imposition of fines when inspections revealed that safety regulations had been violated and to minimize the regulatory burden on railroads. The Plan indicates it is not clear that the emphasis on fines has been the optimum approach to improving railroad safety. The Plan shifts the emphasis away from the mechanical imposition of fines for technical violations toward a more cooperative working arrangement with the railroads. Where a cooperative approach between safety inspectors and industry personnel fails to achieve safe railroad operations, the Plan maintains FRA will not hesitate to impose financial penalties required by law. The combination of a cooperative working relationship and the imposition of fines when warranted is expected to enhance the effectiveness of FRA's entire safety program.

This section of the Plan is also very general and is basically a statement of principles. It does not explain what specific actions are to take place or how progress in using the new enforcement approach is to be evaluated.

Two offices within the Office of the Secretary commented on this section of the Plan's final draft. One office found it lacking in that it did not discuss FRA implementation plans for the new approach, with particular emphasis on organization and staffing impacts. Another office questioned this section of the Plan as follows:

"The report mentions frequently that the prime factor in improving safety is industry cooperation. Given this assumption the question still remains as to what the FRA role and specific actions should be. What is the relative balance between setting standards and enforcing them? What can FRA do to encourage industry to step up its efforts? Where are the weaknesses and where can FRA most productively put its efforts?

The report should more fully address these issues of industry responsibility."

### THERE IS LITTLE RELATIONSHIP BETWEEN THE PLAN AND THE TRANSPORATION SYSTEMS CENTER STUDIES

As stated on page 3, studies made by the Transportation Systems Center were to form the focus of the direction of the Systems Safety Plan. However, there is little relationship between the contents of the Plan and study findings.

In December 1977 FRA entered into an agreement with the Center to perform numerous rail safety studies under the overall title of "Hazard Analysis/Priority Determination Study." This project was designed to improve FRA's ability to determine and measure underlying causal factors and use this knowledge in providing a foundation for applying FRA resources to inspection, enforcement, and regulatory activities. These studies were to outline FRA's safety mission and, more specifically, serve as the cornerstone for the proposed Plan, which was to state FRA's safety goals and objectives, explain how these goals and objectives would be achieved, chart the desired course of action, and measure progress along that course. The large number of findings from the varied studies were to be integrated to form the focus of the Plan.

FRA's Office of Safety provided us with copies of 35 Center studies which, according to FRA officials, were performed in connection with the Plan. While the studies discuss issues relevant to rail safety, such as the transportation of hazardous materials, the relationship between railroad maintenance spending and safety, and the optimum allocation of safety inspectors, the findings of the studies were not integrated into the Plan. For example, though at least three of the studies discussed in detail alternatives to routing hazardous materials away from populated areas and other studies recommended means of allocating inspectors, the results were not discussed in the Plan.

The Director, Office of Planning and Analysis, Office of Safety, concurred with our assessment of the lack of relationship between the studies and the Plan. He told us that the studies do not support the Plan. Though they could be used as a bibliography for the Plan, nothing in the Plan could be footnoted to the Transportation Systems Center studies.

FRA's Administrator has commented and written on more than one occasion that the Plan is merely a statement of principles. Earlier drafts of the Plan were more detailed bearing more relation to the Transportation Systems Center studies. However, the decision to issue the Plan as a statement of principles likely accounts for the studies having little relationship to the Plan.

# IMPLEMENTING THE PLAN COULD RESULT IN FRA NOT TAKING ENFORCEMENT ACTIONS IN SITUATIONS WHERE IT SHOULD

FRA legal memorandums, commenting on drafts of the Systems Safety Plan, stated that implementing the Plan could lead to FRA not taking enforcement actions in situations where it does not have the prosecutorial discretion to decline taking enforcement actions. We believe that (1) FRA's discretion not to invoke the penalty provisions of safety statutes is quite limited and (2) the Plan is so vague and lacking in specific standards that, at best, it provides no assurance that enforcement action will be taken in situations where they are required.

FRA has enforcement responsibilities, delegated to it by the Secretary of Transportation, under various railroad safety laws. These laws include the Safety Appliance Acts, the Locomotive Inspection Act, the Federal Railroad Safety Act, and the Hazardous Materials Transportation Act. The imposition of civil penalties for safety violations is central to the enforcement schemes of these statutes. Several internal FRA legal memorandums prepared in June 1981, 6 months prior to the issuance of the Plan, discussed the enforcement policy presented in a draft of the Plan.

Each memorandum expressed the opinion, based on the language and legislative history of the safety statutes involved and on relevant case law, that the enforcement policy in the Plan exceeded the relatively narrow prosecutorial discretion which FRA would probably be held to possess.

The scope of FRA's enforcement discretion cannot be defined precisely. Certainly FRA has considerable discretion in developing general enforcement strategies, such as deciding where and when to conduct inspections and what points to emphasize in inspections. Also, to the extent that safety standards involve questions of judgment and interpretation, FRA has discretion in determining whether the evidence supports the existence of a violation. However, whether FRA may decline to seek a penalty when the existence of a violation is clear is another matter.

We are not aware of any direct judicial holding on the scope of FRA's prosecutorial discretion, if any, under the railroad safety statutes. In fact, as far as we can determine, its past practice of exercising some prosecutorial discretion has not been challenged in the courts.

Given this background, we would not take exception to the assertion that FRA has some discretion not to seek civil penalties even in the face of apparent safety violations. However, this by no means forecloses the possibility that FRA's overall approach to the exercise of prosecutorial discretion may represent a breach of its statutory responsibilities.

The Plan is vague and lacks any real standards to apply in exercising discretion over the imposition of civil penalties. The Plan states that safety violations will continue to be cited whenever railroad cooperation is not forthcoming and safety is impaired. However, it does not explain how or when penalties are to be initiated, or the basis for determining when the cooperative approach has failed to achieve safe operations or is not forthcoming and safety has been impaired. There is no explanation of the meaning of terms such as "cooperative approach" and "railroad cooperation" that are used in the Plan. No time limits are set on how long FRA will wait before citing violations. Also, it is not clear how FRA will determine that safety has not been achieved or has been impaired and who would make that determination.

The difficulties with the Plan go well beyond the vagueness of particular words. The basic thrust of the Plan, stated quite explicitly, is a shift away from the use of civil penalties as the major technique for carrying out the purposes of the railroad safety statutes. Yet, as discussed previously, it is clear that civil penalties are central to the enforcement scheme envisioned by the Congress in enacting these statutes. Moreover, it is clear that the Plan contemplates more than a shift "away from the mechanical imposition of fines for technical violations\* \* \*." It is our understanding, confirmed by a July 15, 1982, letter to us from FRA's Administrator, that FRA's enforcement practice has never been to impose penalties "mechanically." Thus, some more fundamental change in practice must be intended.

#### CONCLUSIONS

The Systems Safety Plan is, in essence, a statement of principles. It is not a document that can be used as an effective management tool to control and evaluate FRA's carrying out of its rail safety objectives. The Plan is not specific in discussing actions to be taken, explaining how safety objectives are to be achieved, or in identifying how progress toward achievement is to be evaluated. Further, there is little relationship between the Plan and studies made as part of its background and development.

The Plan is also questionable from a legal standpoint. The Plan is so vague and lacking in specific enforcement standards that, at best, it provides no assurance that enforcement action will be taken in situations where they are required. For example, it is entirely consistent with the language of the Plan to conclude that as a matter of FRA policy civil penalties will not be sought, even in the face of clear evidence of violations, either if railroad cooperation is forthcoming (notwithstanding the seriousness of the violation from a safety viewpoint) or if safety is not impaired (nothwithstanding the absence of railroad cooperation). At worst, we believe that FRA inspectors may well interpret the Plan as a signal to generally avoid citing violations in a wide range of circumstances. This seems particularly likely

since they are being told in the Plan that whatever discretion they exercised before constituted mechanical enforcement.

More specific standards are necessary and appropriate. We recognize that it would not be practical, or even possible, to formulate guidance for every case. Likewise, we assume that FRA would not wish to provide, at least in any publicly available issuance, information on precisely when penalties will or will not be sought. Nevertheless, there is a clear need to provide standards for inspectors that will, at a minimum, flesh out the vague statements in the Plan concerning the exercise of prosecutorial discretion in the use of civil penalties and demonstrate how FRA will meet its statutory responsibilities concerning civil penalties. Finally, such standards may be necessary if FRA is ever challenged in court on its exercise of prosecutorial discretion.

### RECOMMENDATION TO THE SECRETARY OF TRANSPORTATION

We recommend that the Secretary require the FRA Administrator to develop specific standards to guide its inspectors on how prosecutorial discretion is to be exercised within the framework of the Plan.

# MATTERS FOR CONSIDERATION BY THE SUBCOMMITTEE

In view of the Plan's imperfections, the subcommittee may want to require the Secretary to develop a complete Systems Safety Plan. The subcommittee, if such a decision is made, could be more specific about what the Plan should discuss and how detailed the document should be. As a minimum, the Plan should discuss what specific actions are to be taken, state the reasons for taking the actions, explain how safety objectives are to be achieved, and identify how progress toward achievement will be evaluated.

#### AGENCY COMMENTS

DOT was provided the opportunity to comment on a draft of this report. However, they did not respond within the alloted time frame.

Copies of this report are being sent to Congressmen Dan Glickman and Robert Matsui at this time. As arranged

with your office, we do not plan to distribute this report further until 5 days after the date of issuance. However, if its contents are announced earlier, we will then send copies to the agency and other interested parties.

Sincerely yours,

Comptroller General of the United States